## **NOAA Education Council Meeting**

Date/Time: January 21, 2015 / 1:00–4:00 pm

Location: SSMC3, Room 14836

Dial-in: 866.901.0711

Passcode: 8134683, leader code: 1144183

Contact: Lisa Nakamura (202) 482-3139, Marissa Jones (202) 482-4592

Adobe Connects Link to Meeting: http://connectpro46305642.adobeconnect.com/edcouncil/

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#### **AGENDA**

- 1:00 Welcome/Opening remarks Louisa Koch
- 1:15 Implementation Retreat Planning Update (*Input Requested*) Christos Michalopoulos & Lisa Nakamura (10 min presentation 20 min discussion)
- 1:45 Data in the Classroom Working Group Report Out (*Input Requested*) Atziri Ibanez (15 min presentation/ 15 min discussion)
- 2:15 Break (15 min)
- 2:30 Generating a Pool of Candidate Programmatic Actions for the Implementation Plan (*Input Requested*) Lisa Nakamura (10 min presentation/ 30 min discussion)
- 3:10 What is an Education Council Activity? (*Input Requested*) Marissa Jones and Lisa Nakamura (10 min presentation/ 10 min discussion)
- 3:30 Updates and announcements

#### **Attendance:**

In person: Louisa Koch (LK), Bronwen Rice (BR), Bruce Moravchik (BMo), Carrie McDougall (CMc), Dan Pisut (DPi), Erik MacIntosh (EM), John Baek (JB), Jeannine Montgomery (JMo), Kristen Jabanoski (KJ), Leah Henry (LH), Marissa Jones (MJ), Matt Ellis (MEl), Peg Steffen (PS), Ron Gird (RG), Sarah Schoedinger (SSch), Tracy Hajduk (TH).

On the phone/chat: Amy Clark (AC), Atziri Ibanez (AI), Christopher Nelson (CN), Christos Michalopoulos (CM), Frank Niepold (FN), Jennifer Bennett-Mintz (JBM), Jennifer Hammond (JH), John McLaughlin (JMc), Judy Koepsell (JK), Lisa Hiruki-Raring (LHR), Maia McGuire (MMc), Marlene Kaplan (MK), Paula Keener (PK), Rochelle Plutchak (RP), Shannon Sprague (SSp), Stacey Rudolph (SR), Stephanie Bennett (SB), Tanja Fransen (TF)

### **Summary of Action Items and Decisions:**

ACTION: Establish Coordinating Committee/Strategic Plan Advisory Board to discuss and decide upon revisions to the Strategic Plan. Completed 2/10/2015

ACTION: Atziri Ibanez, Frank Niepold, and Tracy Hajduk volunteer to test the Programmatic Actions form.

## Welcome/Opening remarks

- LK: There are a number of staff changes coming up. Erik MacIntosh was hired as the Science On a Sphere coordinator. New Outreach Center staff, Matt Ellis, was hired and he will be splitting his time between the Outreach Center and Fisheries. Pat Drupp, our 2015 Knauss Fellow, will be joining the office in February. This is Marissa's last Council meeting as a Knauss fellow. She is staying on and will continue to lead the Strategic Planning effort. Welcome to our new faces.
- LK: Dr. Sullivan said that the world is changing and NOAA will too. Desktop computers have gotten powerful and NOAA models are publically available. People can run NWS models on their own. Small companies can go into business to provide boutique services. We need to think about doing things in different ways to be competitive. Companies are coming in and providing value added services using NOAA data (sea level rise, harmful algal bloom forecasts, etc.). These are "value added" services. Goldman Sacs was trying to provide global water level data because it will influence finance. NOAA needs to provide the profile service, set standards, certify, and set standards for certifiers. NOAA should think carefully about how we position ourselves.
- We've concluded the FY14 Unified Data Call. Will now use numbers in Hill visits and all communications this year. These will never be perfect, but we have what we're going forward with for 2014.
- Strategic Plan comments were due last Friday. Thanks to those that have responded. We have an extremely tight timeline to stay on track for a May Implementation Retreat. There were many comments on the Framework language (Mission/Vision, Goals, Objectives, Strategies, Evidence of Progress). As a recommended policy, will need Council approval on any changes, however small, since they were already vetted and approved by the Council previously. Given the tight timeline, we recommend reestablishing a Strategic Plan Advisory Board to discuss and make decisions on behalf of the Council.
  - o ACTION: Establish Coordinating Committee/Strategic Plan Advisory Board to discuss and decide upon revisions to the Strategic Plan.

Implementation Retreat Planning Update (*Input Requested*) - Christos Michalopoulos & Lisa Nakamura (10 min presentation 20 min discussion)

- LN: Implementation retreat will take place May 12 14. Thanks for filling out the doodle poll.
- LK: Lisa, you want programs who are interested in piloting this process to contact you or volunteer now?
  - o LN: We'll go through an example later in the Council agenda and that will give people a chance to decide if they want to reply. We can get a sense of the room then.

Data in the Classroom Working Group Report Out (*Input Requested*) - Atziri Ibanez (15 min presentation/ 15 min discussion)

• FN: A key driver is NGSS. The work that your group did to integrate with NGSS would be valuable for the group to hear.

- o AI: In one of the updates I gave last year, I mentioned that we did some cursory evaluation. Lately we've been evaluating webinars and the coral bleaching modules. The teachers could see how the modules matched the NGSS learning sequence. We will have a webinar on Jan 29. There are over 130 people who want to participate.
- FN: One of the challenges we see is marketing products and connecting with the user base. Sometimes going to decision makers is faster than connecting with individual teachers. There are fewer of them.
- AI: That's a great question. We are just touching the waters in terms of developing this
  more strongly. The Office for Coastal Management has assigned someone to help me
  with the marketing piece. You're pointing out other levels that we could access.
- LHR: I'm excited about the Data in the Classroom (DitC) project and your website. It looks like your modules are on a large geographic scale.
  - AI: When we started, we were looking at the needs of teachers in accessing data portals. We chose large data topics that would meet the education standards. We've been getting lessons learned. Regional data is an area we have to start thinking about. We would love to hear your thoughts.
  - O LHR: I brought this up because I went with one of our scientists to a classroom in Anchorage, AK. I thought he was using DitC, but he didn't know about it. There is a lot of opportunity for regional representatives to connect and point out how regional and global data can be used. Regional fisheries data would be powerful. There are integrated datasets fisheries, oceanography, and economic data. It would be nice to make that available to teachers. The teacher was saying that accessing datasets was difficult because the data sets were so large, such as dive data for Waddell seals. We have a lot of marine mammal telemetry datasets but they're huge. Just sub-sampling them can be a budgeting exercise for students.
  - O AI: That's one of the technical areas we work on in the background for DitC. DitC is just one model for how you can package this information. There are many other models out there, so don't feel that this is the one way to do it. We're happy to engage in new conversations about how to do it. Happy to follow-up offline.
- LK: You talked about the Citizen Science Community of Practice. I just wanted to understand the need that you see and the value that it might create.
  - o AI: We haven't discussed this much, but Bart and Shannon have been using this system. There is a lot of effort in this area. There are best practices that can be shared, such as Lisa's comment on sub-sampling and large data files.
  - o DPI: There are a lot of offices that are interested in engaging with this type of activity, particularly with NGSS. It would be nice to have best practices.
  - o LK: These would be parts of NOAA that are interested in making data available to educators?
  - o DPI: We can give people information, or add another module.
  - o LK: This could be a do it yourself option.
  - AI: We haven't discussed this fully. I don't want DitC to be the one and only model. I
    think we can learn from Bart's work, but there are other ways of doing it. Yes, we don't
    want to do duplicated efforts, but we all need to reach our own audiences.
  - O SB: We did a live webinar and the teachers were really engaged. It's almost like a tutorial for how to use data to explain a certain topic. Some of those tutorial-like elements we could also incorporate for professionals for decision-making purposes.
  - O PS: The use of data is something that NOAA can uniquely bring to the table. Our data are extremely useful. It would be useful for us to take a close look to see how we can add value.
  - o FN: We need to understand where we fit in well. The work that the climate and ocean community has done could be really valuable.

- AI: We were thinking about doing that last year. Unfortunately, we ran out of time. We thought about the topics across NOAA that are covered in DitC. That kind of mapping would be helpful.
- FN: When is the transfer off the server expected to happen?
  - o AI: Dan and Nina are meeting with them next week. We don't have a clear answer yet. His team needs to look through it carefully.

# Generating a Pool of Candidate Programmatic Actions for the Implementation Plan (*Input Requested*) - Lisa Nakamura (10 min presentation/ 30 min discussion)

- PS: What counts as evidence?
  - o BR: There are other types of evidence. It doesn't have to be numbers.
  - o LN: It could be accomplishment narrative, numbers, or more.
- BR: The point of this is getting at the action statement. The exercise is a process that you can use if it helps you. B-WET does other things too, so it rapidly becomes an accordion of possible actions. Looking at the objectives helped me focus it.
- LN: We made a commitment as a Council to track progress toward the Strategic Plan and we are putting programmatic actions into the plan. But it doesn't have to be perfect or outcome measures right off the bat.
- PS: What's a substantial activity?
  - O LN: That's a difficult concept. You could put everything in the kitchen sink in our implementation plan, but the idea is to get a few select things. Maybe it's a large effort, maybe be it's something you're collecting data on. The idea is to pick a few things that the Council will pay attention to.
- TH: We can try Ocean Guardians:
  - We give small grants to schools to do a project that they can measure an impaction on the environment like trash or invasive plant control, etc.
  - o ACTION: We provide small grants to schools to implement stewardship-based projects that demonstrate a positive impact on the environment.
  - o Objectives: 2.1, 2.3
    - Has to do with schools, so "organizations" is a better fit. You also talked about students, so that fits 2.1.
  - Evidence of progress
    - 2.1a: keep track of the number of students. Might do demographics. Working on expanding program into areas of need (schools).
    - 2.3a: We have information on what the students collect, e.g. number of pounds of trash, number of plants. Sometimes there's a community element. We do focus on which schools. Schools that keep doing the projects after, so there's ongoing benefits after the funding ends. Some are moving from school to district level.
      - BR: Aren't there tiers for the schools that participate?
      - TH: Yes, they can keep doing work after getting seed money from the grant.
    - TH: What about schools collecting pounds of garbage? Can we use that?
    - FN: That might be one step out from this. That's their actual environmental impact.
    - JB: I remember having lots of conversations with Steve about this. We had those at the goal level, we did not include them at the objective level. The objective is not the end all be all.
    - PS: I think it fits with 2.3. It's a way to quantify their participation.
    - BR: I agree, it varies by schools.

- TH: One of the strengths of the program is that we have schools measure the impact they have on the environment. If we don't include it, I think it would be a missed opportunity.
- Objective-specific actions:
  - 2.3
  - Original action is written as 2.3, might re-write to have it be 2.1.
  - BR: This is where B-WET struggles too because we're a granting program. We support schools in implementing these activities.
  - LN: You would submit one form entry per each action that relates to only one objective.
- O SSch: If your project meets multiple objectives, then you have to submit separate entries for each form?
  - LN: Yes. You can prioritize based on whether you have evidence and want to share it.
  - BR: For ELG, you would be teasing out some of what you do.
  - LN: You can submit as many as you like.
- o PS: Are we looking for projects that will go forward from here to the future?
  - LN: Yes, not old projects.
- FN: Do you want us to start? Do you want a consistent approach to tracking things that support multiple objectives?
- o LN: There's an action statement and a place to give more context.
  - FN: Teaching climate is going to meet multiple objectives so you could tie it to together. So you always have a way of connecting things.
  - JB: They are different actions.
  - FN: Is there a time when you would see the same project. Or the objective differentiated by programs. We'd have to have a name. I don't see that being differentiated by different outcomes.
  - JB: Let's take 1.1, 1.2, 1.3. You're creating things that do all of this. The burden is on you to collect evidence on all of these things. Do you have evidence on 1.1, 1.2, and 1.3?
  - MJ: Would a name help to show that actions are connected?
  - FN: Yes, but what John said greatly decreased my ability to say that we're getting there.
  - LN: Increasing is key. We don't expect everyone to have these perfect from the get go. You know something, let's start somewhere. John's encouraging us to think about what progress we're making.
  - AI: What Lisa, Marissa, and John showed us is to encourage us to use what we have. In NERRS, there are some things that we are collecting, but definitely some things we won't collect. I'm not confident we will be able to share all of what we're doing in NERRS.
  - FN: The Google analytics is evidence.
  - AI: I'm not sure if I'd use that as integrate. We're definitely not tracking on different things.
- LN: Recommend piloting this process with approximately 3 volunteers. In March we're
  doing the Annual review. It will be great for the data team to have some information to
  work with. This timeframe is shaped around planning the implementation retreat.
  - ACTION: Atziri Ibanez, Frank Niepold, and Tracy Hajduk volunteer to test the Programmatic Actions form.
  - If anyone else has a desire to be part of the pilot, let Lisa know by next Wednesday.
  - AI: I would want to encourage us not to look at it that way. Even if we don't

- have evidence of progress, we should still go through it. It is a useful exercise. This is a great output of the M&E effort. So, here we go! It's exciting.
- FN: I'm completely on board with that. It's how to get the series of measures. I'm not able to get to the final one and I don't know how I'm going to get there. The precursor is intend to integrate, that's as far as we can go. That's where my reservations are.
- BMo: You've put together a really excellent model here. You could go back and forth on the language. What you intend to do. Teachers say all kinds of things after a webinar. The actual rates are much lower. If people are going to be real about it. Do you have evidence that you can collect? If not, then it moves you to think about what you should be doing. Let's make it a real thing that we are doing.
- FN: In M&E, we did talk about precursor states. Not every program is able to get there yet. How and when we're able to get there. Having precursor information is valid, but it's
- LK: I think you've got to commit with what you've got. If that spurs you to get more later. This is not easy, and walking through it is helpful. Thank you, Tracy for being brave.

# What is an Education Council Activity? (*Input Requested*) - Marissa Jones and Lisa Nakamura (10 min presentation/ 10 min discussion)

- TH: How long is the Strategic Plan (SP)?
  - Marissa: 25 year plan updated every 5 years (SP); 2 year plan updated every year
     Implementation Plan (IP)
- RG: We've done a lot of work on partnerships. Where are we going with Partnerships in general? Not necessarily only formal MOUs. Would like to see something that captures the importance of partnerships. Our partners offer us good information.
- FN: Try and run previous work against the criteria. Did it work with Partnerships Working Group? M&E?
  - o Marissa: Helpful to think about the type of work being done also.
- JB: What is not a Council activity?
  - Marissa: If it doesn't have a broad benefit. If it doesn't require coordination of three or more Council programs. We'll hear from the network presentations about what the Council can help with, with regards to the network priorities. I suspect we would be more on the same page if we were to take the evidence of progress (EoP) survey again.
- AI: I pressed the Data in the Classroom group to think about whether the group was needed into the future. There is a part of the group that doesn't require Council work (developing modules). Important to think along the lines of what Louisa was asking. What is the purpose of having another group for Data akin to Citizen Science. At the May retreat, hope we won't be confined to current working groups but think about the SP.
- PS: People are interested in a task. Defining what the task is (with an outcome that is measurable) is important. Not just dreaming up concepts. Council should come up with discrete task tied to making progress toward the Objectives.
- MJ: Doing work to think from the SP perspective and also from the Programmatic perspective right now. Interesting to see how they meet up.
- FN: Based on the gap how do we design a strategy for the Council as a whole.
- CM: Yes, the retreat is the time to discuss through the pool of potential actions to consider, consider the landscape (gap analysis), then identify what we're working on. Would not use the word lofty. Practical in the next two year time frame.

- AI: There is a need to look at the bigger/larger questions. I understand the input into the retreat. But I can see there are gaps (e.g. Goal 2) that we may need to put on the table.
- FN: What NOAA does is lofty. We have a lot more we need to do than the resources we have. We have to be creative to be able to do more by working together.
- BMo: One should think about either maintaining or establishing a WG that ends.

### Updates and announcements

- JMc: There is an upcoming panel on the history of citizen science and where it's going. There is a second workshop on March 5<sup>th</sup> about protocols for citizen science projects.
- RP: OAR has an official new Assistant Administrator, Craig McLain. I missed the last Council meeting where we signed the new MOU with the Exploratorium.
- AI: We completed the scoping study on the economic contribution of NERRS education programs. We had a webinar last week. You are welcome to check out the resources.
- FN: Climate Education activities and the National Council for Science and the Environment. There might be opportunities to coordinate on this.
  - o LK: You might want to send that out to Ed Council. Use Ed Council all.
- LHR: We're having the Alaska Marine Science Symposium this week. Rich X who is our science writer is here. It's a great opportunity for educators to network with scientists. This is the first time that Rebecca Reuter and I have been able to come here. LN was following up with us on Unified Data Call details. There's a large portion of our fisheries education work that's falling through the cracks and we're going to talk about capturing that for future years.
- TF: I was at AMS two weeks ago. When I presented on SkyWarn in Ed Council, one of the recommendations was to have a SkyWarn session at AMS. None of the YouTube videos are in Spanish, but one of the students offered to do that so hopefully he'll be picked up with the Pathways program. Training the trainer: we'd like to get some of the WRN Ambassadors trained up. They're doing a three hour program on citizen science. I might want to get her in touch with the Citizen Science COP and maybe get her to look a little deeper than the CoCoRaHS network. The program will air in 2016. I love seeing the Science On a Sphere.
  - o JMc: Is this related to NOVA?
  - o TF: I don't know.
  - o JMc: If so, you might have her talk to Jeffery Hanes.
- SB: January Coastal Zone Management Program. We haven't integrated or taken stock of all of their efforts yet. We are working to capture this other network. We also had an education conference in Honolulu.
- BR: We participated in an education conference in Honolulu. Stephanie and John Mitchell were able to have a B-WET grantee meeting. We talked about the national evaluation. The grantees were enthusiastic to meet more together. Thanks for the opportunity to do that.
- JB: We also briefed the NOAA Educators on evaluation.
- RG: Weather Fest appeared to be successful at AMS and we had a very successful teacher workshop with Share-A-Thon. The key to success is to get active science teachers involved.
- TH: Sanctuaries had nominations. Mallows Bay in the Chesapeake. A Region of NE Florida. Accepted for consideration. Two are under review in Wisconsin and the Aleutians.
- LH: The competition for the grant is closed. We had twice as many submissions as last year. We may need some reviewers. Email Leah Henry if you are interested in being involved.
  - o BMo: The process is well organized.
- SSch: We will be sending the draft FFO to the Ed Council for review. We are interested in input. The general focus is on building community resilience, but focusing on the educational component. We're struggling with determining that niche.
- BMo: The application for stewardship has closed. Climate stewardship projects. We're

organizing peer groups. We've had a successful start to our webinar series. We're opening it nationally. If you want people to get on our list and access our archives, you can contact us. We're doing face-to-face workshops. These are taking place in Seattle. One day workshop at NSF, two day workshop in St. Pete, FL with Climate community of practice. See Bruce or Peg for complete list of workshops.

- PS: The Climate Game jam was announced by the white house. Climate adaptation, behavior change, and stewardship. We are accepting people who want to sponsor a site. We are doing a series of webinars. The focus is on Traditional Ecological Knowledge.
- KJ: Hollings and EPP applications close Jan 30. Let us know if you would like to be a reviewer.